Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-13. (Cancelled).

14. (Previously Presented) A method for detecting the presence of a radar signal emitter, comprising the steps of:

receiving said radar signals by a number of antennas, said antennas pointing in different directions and each antenna covering a sector of the surrounding area:

splitting the radar signals received from the antennas into a number of first sub-bands;

converting each of said first sub-bands into baseband channels;

summing all baseband channels to form a common baseband channel;

digitizing the signals in said baseband channel; and,

processing the digitized signals in order to detect and identify the emitter source.

15. (Previously Presented) The method recited in claim 14, further comprising the steps of:

converting each first sub-band into an intermediate frequency channel;

summing all intermediate frequency channels, thus forming a common intermediate frequency channel;

splitting said common intermediate frequency channel into a number of second sub-bands; and,

converting said second sub-bands into said baseband channel.

16. (Previously Presented) The method recited in claim 15, further comprising the step of performing broadband pulse detection on each first intermediate

frequency channel prior to summing in order to determine the direction and frequency of incoming signals.

17. (Previously Presented) The method recited in claim 14, further comprising the steps of:

transforming a received pulse signal series into the frequency domain;

measuring pulse peak amplitude and average amplitude;

measuring direction of arrival based on amplitude difference and phase difference in the baseband channels;

measuring pulse width;

measuring carrier frequency;

measuring time of arrival; and

registering the received pulses in a carrier frequency/direction of arrival histogram.

18. (Previously Presented) The method recited in claim 17, further comprising the steps of:

identifying which pulses come from the same emitter;

performing emitter analysis;

classifying emitters; and,

performing emitter recognition by comparing registered emitter parameters and sampled pulse waveform to registrations in a emitter library.

19. (Previously Presented) The method recited in claim 18, wherein said emitter analysis comprises:

improving direction of arrival measurements by averaging;

performing echo-recognition by identifying "same" emitter in different directions; and,

performing emitter antenna analysis in order to identify rotation speed and beam width, based on pulse amplitudes.

20. (Previously Presented) The method recited in claim 19, further comprising the steps of:

obtaining direction of arrival information from several neighbouring positions; and,

finding the emitter position by triangulation.

21. (Currently amended) An Electronic Support Measures system for detecting and identifying ~~radars~~ radar signals present in an area, said apparatus comprising:

a plurality of antenna sets for receiving the radar signals, each antenna set including at least one antenna and each set covering a sector of the surrounding area;

a plurality of receiver front ends, each receiver front end being connected to an antenna set covering a specific sector;

a plurality of first band-pass filters connected to a first antenna set, said band-pass filters splitting the signals received from the first antenna set into a number of sub-bands;

a plurality of low noise preamplifiers, each connected with its input to a first band-pass filter and the output connected to one of a corresponding number of mixers, said mixers being adapted to convert a sub-band into baseband;

wherein the output of each mixer is fed to a second band-pass filter, the outputs of all second band-pass filters being fed to an adder, said adder being adapted to combine the signals received from the second band-pass filters into a common baseband frequency channel;

an Analog-to-Digital converter connected to said adder and being adapted to digitize the signals received from said adder; and,

a signal processing unit receiving the signal from the Analog-to-Digital converter.

22. (Currently amended) An Electronic Support Measures system for detecting and identifying ~~radars~~ radar signals present in an area, comprising:

a plurality of antenna sets for receiving the radar signals, each antenna set including at least one antenna and each set covering a sector of the surrounding area;

a plurality of receiver front ends, each receiver front end being connected to an antenna set covering a specific sector;

a plurality of first band-pass filters connected to a first antenna set, said band-pass filters splitting the signals received from the first antenna set into a number of first sub-bands;

a plurality of first low noise preamplifiers, each connected with its input to a first band-pass filter and the output connected to one of a corresponding number of first mixers, said mixers being adapted to convert a first sub-band into an Intermediate Frequency (I^{st} IF), the output from each first mixer being fed to a second band-pass filter tuned to the frequency of said Intermediate Frequency, an output of said second band-pass filters being connected to a first adder, said adder being adapted to combine the signals from the second band-pass filters into a common Intermediate Frequency channel;

a plurality of receiver second stages, each connected to a receiver front end and receiving said common intermediate frequency channel, said intermediate frequency channel being fed to a number of third band-pass filters in order to split said common intermediate frequency channel into a number of second sub-bands, the output of each third band-pass filter being fed to a second amplifier, the output of the second amplifier being fed to a second mixer, said second mixer being adapted to convert said intermediate frequency channel into baseband, the output of the second mixer being fed to a fourth band-pass filter, the outputs of all fourth band-pass filters being fed to a second adder, said second adder being adapted to combine the signals received from the fourth band-pass filters intc a common baseband channel; and,

an Analog-to-Digital converter connected to said second adder and being adapted to digitize the signals received from said second adder, a signal processing unit receiving the signal from the Analog-to-Digital converter.

23. (Previously Presented) The system recited in claim 22, further comprising a plurality of first detectors, each with an input connected to the output of said second band-pass filters, an output of each first detector being connected to an input of a comparator, a control logic connected to said first comparator, said logic being adapted to identify on which antenna a given signal is received.

24. (Previously Presented) The system recited in claim 23, wherein each first low noise preamplifier and each second amplifier are equipped with an enable/disable input, said enable/disable input being connected to said control logic, said control logic being adapted to enable the operation of selected amplifiers and disable other amplifiers, in order to save power.

25. (Previously Presented) The system recited in claim 22, wherein said system includes a total of 12 antennas, of which two antennas point in each direction, one of said two antennas covering the range of 2 - 6 GHz and the other covering the range of 6 - 18 GHz.

26. (Previously Presented) The system recited in claim 22, further comprising:
a network connecting a plurality of such Electronic Support Measures systems to a control centre, said control centre including a database of known radar emitter signal signatures, wherein said control centre is operative to 1) receive direction and signature information of received radar signals from said plurality of Electronic Support Measures systems, 2) determine the position of a radar emitter by triangulation, and 3) determine the identity of said radar emitter by comparison with emitter signatures stored in said database.

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